

Reconciling Deductive and Inductive

Approaches to Work Motivation

by a Syndetic

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### Abstract

Theories of work motivation are reconsidered from F. W. Taylor to E. A. Locke. These are characterized by a behavior paradigmatic point of view as either of analytic-deductive or analytic-inductive kind. Hence rationality is understood according to a determinism leaving rationality according to a moral point of view out of consideration. In order to incorporate human value into the study of work motivation a syndetic approach is called upon. This involves taking the point of departure in the Schema concept of Kant, studying behavior by means of the "Agent-action-Object" paradigm of Bierschenk & Bierschenk. The behavior paradigmatic frame of reference is the process paradigm evolving from J. J. Gibson's theory of information-based perception.

Our subject is what we hold as being the basis of leadership in productive enterprise: The theories of motivation at work. Economically speaking, we are considering important provinces, as the issue here is the utility of investments in "social systems change" and "attitudinal changes of human resource management", so far as in legitimating such investments theories of motivation have been the fundamental basis of the last sixty years. Till now theories of work motivation has been constructed in the tradition of natural sciences, meaning that the precondition for explaining causality is an acceptance of a naturally given cause of all behavior.

We claim, that this represents a serious drawback as far as explaining "generative behavior" is concerned, i.e. behavior resulting in the production of objects or conditions of consumptive value. Thereby it is assumed a determinism which makes the study of human behavior to a study of "consumptive behavior". It is exactly the type of behavior least asked for in an organizational setting, since it represents a threat to organizational survival in the same way as generative behavior represents its promises.

Hence the dubiousity, which we do not want to elaborate further upon here, concerning the validity of existing work motivation theory, and the reason why we find it necessary once and for all to leave the natural sciences tradition and with it the analytic approach to the study of human behavior. We favour a syndetic, i. e. conjunctive, approach, at least as far as understanding motivation at work is concerned.

Using the syndetic approach is to assume, that we as human beings act in accordance with a determinism of our own choice: "the point of view" or "perspective of action", as we call it - with the perspective turning up in the way of acting vis-à-vis the given object.

How to decide upon which perspective is chosen is the methodological issue, to which Bierschenk & Bierschenk (1986) address themselves, and we shall leave it aside for the moment. What we will try to show here is the perspectives of action being relevant to define for the study of human behavior. First, however, we shall address the behavior paradigmatic issue involved, as the



syndetic approach implies basing a scientific study of work motivation upon a behavior paradigm which leaves room for incorporating the choice phenomenon in the model-building.

#### The Behavior Paradigms of the Natural Sciences

The existing work motivation theories are founded upon one of three behavior paradigms

1. The instinct paradigm
2. The association paradigm
3. The structure paradigm.

The individual's perception of the world is seen here as depending on the reception of sensations originating from stimulation of the sense organs. Chemical processes are released, hereby transforming stimuli to nerve impulses, which the brain elaborates. From the brain efferent impulses go to the motoric apparatus and behavior results.

Following the instinct paradigm the brain-instigated elaborative processes progress as predetermined by a specific code, while following the association paradigm the code is formed due to the association principle; the code is experience-based and consequently different from one individual to another.

#### The "Code" Concept vs. the "Gestalt" Concept

With the structure paradigm one has left the code concept in favour of a dynamic elaborative process, based upon the assumption of two kinds of impulses, the exterosensoric, originating outside the organism and the interosensoric, coming from inside the organism and varying in content and intensity with the physiochemical status of the organism. The result of this process is a "Gestalt", with the surrounding world taking form in correspondence with its individual importance, the momentary physio-chemical status taken into consideration. Maturation of brain-structures in the course of the individual's lifetime leads to formation of still better "Gestalts". The better the "Gestalt", the better the basis for a harmonious person-environment relation.

As perception theory was formed upon the basis of these three behavior paradigms, learning theory was formed as far as possible within the paradigmatic limits, with the association paradigm as definitely its superior basis.



### A Hedonism or Homeostatic Organismic Concepts

The deterministic reflections crystallized in a view of man according to which behavior was seen as rational expressions of fight for survival, as well of the species as of the individual, with either a hedonism or a homeostatic organismic view chosen as the basis of understanding rationality of human behavior. With the establishment of the deterministic basis motivation theory could be formed. With the incorporation of perception theory and learning theory in the models built, their complexity varied.

The work motivation theories of analytic-deductive quality. Under this heading we shall mention the following theories, considered as key-theories of work motivation: (1) the economic-rational theory, (2) the social-rational theory (Mayo), (3) the self-realization theory (Maslow), (4) expectancy theories (Vroom), and (5) operant conditioning theory. The most simple of motivation theories are deduced from the instinct paradigm. The economic-rational theory, saying that man in choice of alternative goods always picks the one most valuable to his survival, is the motivation theory of neo-classical economy. It also became the point of departure for "Scientific Management", as it legitimated the thesis of Frederick W. Taylor (1914), saying that in task solution there is one and only one method and one tool, faster and better than any other. Once found they should be used by anyone, naturally.

The theory lying behind the "Human Relations" management philosophy is Elton Mayo's social-rational motivation theory, saying that man choosing among more goods picks the one that contributes the most to the subsistence of the group. What Mayo (1946) observed was an industrial scene in which natural group building was threatened, as showing up in massive symptoms of discontent among workers. The cure was strengthening of human relations at work, because:

"The desire to stand well with one's fellows, the so-called human instinct of association, easily outweighs the merely individual interest and the logical reasoning upon which so many spurious principles of management are based" (Mayo, 1975, page 39).

What was aimed at was to create job satisfaction for "human



beings", as worded by Herbert Simon, "who satisfice because they have not the Wits to maximize" (Simon, 1976, page xxviii). Simons works, the first works of economic behaviorism, are based upon social-rational motivation theory.

The lack of opportunities for taking into account the individual differences lead to dissatisfaction with instinct theory. Therefore, basing work motivation theory upon the structure paradigm became important. Consequently, the "self-actualization" theory, based upon the need concept was launched by Abraham Maslow (1954).

The human ressource management theorists now focused upon producing "higher order" needs functioning with employees. Douglas MacGregor (1960) proposed leadership based on the principles of integration and self-control, adding that by doing so also the economical side of the enterprise should prosper. This credo left no doubt with Maslow (1965), who found that firms working for mental health among employees by "Eupsychian Management", as he baptized it, should be rewarded with tax reductions. Other well-known work motivation theories based upon the structure paradigm are the expectancy theories. The first of them was proposed by Victor Vroom (1964). It rests upon the Lewinian concept of "valence". Vrooms point of departure was the notorious incoherence between job satisfaction and job performance. His thesis was, that gaining control of job performance depends upon taking a given performance level of an employee as his idea of an attractive outcome. This idea, Vroom proposed, should be manipulated by increasing the attractiveness (valence) of making an effort to reach a higher performance level. This should be done by strengthening "the instrumentality" of the higher level of performance, i.e. by making it synonymous with easier access to attractive goods, and by hightening the employees' "expectancy", his belief in himself as one being able to perform at a higher level, eventually strengthened by management support. Validity-tests of Vrooms model, named the "V-I-E model", only lent it limited support. Eventually, however, the philosophy of situational leadership was forwarded, for instance by House & Mitchell (1974). Their "path-goal" -theory of leadership is formed upon Vroom's model. The term "behavior modification" covers the application of operant con-



ditioning theory, originating from the association paradigm. The principles of behavior modification was proposed and applied to organizational settings by Luthans & Kreitner, who wrote a book on the subject, "Organizational Behavior Modification" (1975). Implementing operant conditioning by means of positive reinforcement beyond any doubt has a behavior changing effect. But to control what changes are brought about, the complexity of the organizational setting taken into consideration, seems nearly impossible. Just think of the difficulties involved in mapping, what rewards are reinforcing. Furthermore some of the positive reinforcers might be unidentifiable, because no one ever thought of them as rewards. Finally you had to take into consideration, that contingent relations might exist between different outcomes, making otherwise positive reinforcing rewards negative.

#### Work Motivation Theory of Analytic-Inductive Quality

We now leave the analytic work motivation theory. It didn't work so well. Many of its proponents thought that it was due to ill will among managers. Taylor did and so did Mayo, who thought it necessary to create a new "administrative élite", schooled in the behavioral sciences appropriate to his credo. Maslow would punish managers, who didn't do as he told them. Fortunately Vroom and the proponents of "organizational behavior modification" ran into serious validity problems, so applications of their theories remained modest. The predictive value of a valid analytic, determinism-based, theory shall be optimal, when every employee chooses to function in accordance with his natural dispositions. Such an unanimous affiliation to a natural sciences outlook on man can not yet be said to have been bestowed on any theory of work motivation by human beings in any firm.

#### Intentionality

T. A. Ryan (1970) wanted the concept of "intentionality" included in the psychology of human motivation, hereby side-tracking determinism. He refers to learning experiments of the German Würzburger school, that led to the assumption of factors of non-conscious nature, i. e. higher order functions in Gibson's terms (1966), governing the processes of perception and conception. By subjects given task-instructions there emerged goal-conceptions, which might stay unchanged as a "determining tendency" - the term



covering the fact, that even after having forgotten the task-instruction subjects solved the task at hand in accordance with the given instruction. The tendency-setting, motivational force is called an "intention" (Compare with the Zeigarnic effect).

Further investigations led to the discovery, that the intention is manipulable. As Mace (Ryan, 1970, p. 145) showed already in the thirties:

"... the instruction to "do your best" results in a rather vague intention, and one which is less effective in maintaining a high level of performance than others [i. e. containing more specific standards]".

The Goal-Setting Technique. Due to having read the works of Frederick Taylor, Edwin Locke (1978) went further with these experiments and became eventually originator of the "goal-setting technique". This is the practical application of the hypothesis, that a specific, difficult goal results in a higher performance level than do goals of a general nature, i. e. "do your best"-goals. A widespread adoption for practical use of goal-setting technique took place. This in spite of vigorous criticism from scientific quarters. Indeed, as an example of application of an inductive-analytic strategy of research, goal-setting "theory" suffers from a serious drawback. It is due to lack of possibilities for proving the occurrence of a given phenomenon by referring to the occurrence of other phenomena. The intention, phenomenally speaking, can only be explained as yet another trait to add, to the description of human nature. Its co-variation with other forces of motivational nature is unexplainable.

#### The Process Paradigm and the Syndetic Approach

The process paradigm leans heavily upon the theory of information-based perception, as it was put forward by James J. Gibson (1966). He broke radically with all former conceptions of the function of the senses. According to Gibson, perception originates from dynamic, time-limited, interactions between an outer world and the perceptual system of the organism's inner world.

The invariants of the perceptual system are:

- the exterosensoric (including the interosensoric), and
- the propriosensoric



states of functioning. Thanks to the perceptual system an immediate "pick-up" of information takes place. It means that any quality of the world-as-perceived is produced directly by stimulation of the sense organs.

What is "seen" by the individual are physical events, from which information is extracted. "The event" is defined as something that is changing in appearance. What happens, for instance, when an individual is changing position confronting an object? Events contain the invariants of the world - and its laws. By information-seeking activity the individual learns about the world. Action is to be, so to speak.

Gibson's theory is a support of the thesis that

- I. Conception of form is an effect of the perception of formless invariants over time.

As such it invalidates the analytic, natural sciences strategy of research used in attempts to understand human behavior. Take for instance the thesis of gestalt psychology, that

- II. Conception of form is due to the perception of form-elements.

It follows from the "Gestalt"-thesis, that these two statements must be accepted:

- II. 1. Perception of form results from brain-processing of form-elements.  
 II. 2. The sense-organs function exclusively as neutral intermediaries of sense-impressions.

II. 1. and II. 2. lead to the assumption that what is acted upon, is a function of

- stimuli from the outer world

and, from a psychology-of-needs point of view,

- the need-condition of the organism.

What followed was the one and only way out: incorporating the emotional element into the domain of perception theory. Therefore all behavior had to be seen as given by nature, as determined by its organization a priori.

Owing to Gibson the emotional element has become a manipulable entity. Human behavior can be understood independent of a determinism. This is the constructive nucleus of Gibsons rebellion. He was inspired by Thomas Reid, a Scots philosopher of the 18th



century:

"Thomas Reid's assertion in 1785 is just as true as it ever was, that "the external senses have a double province; to make us feel and to make us perceive." They "furnish us with a variety of sensations" and they "give us a conception of external objects."" (1966, p. 319).

In behavioral research we can now look at behavior as a result of interplay between two forces. They govern perceptual functioning - given by nature, and emotional functioning - given by choice. The product of interplay is action.

On perceptual functioning Gibson writes:

"Discrimination is itself a kind of useful action - an activity reinforced by clarity, not by punishment or rewards" (1966, p. 282).

The organizational principle of emotional functioning is what Kant called "reason". You might also call it "the consciousness of choice" - you yourself choosing for what purposes the eventually gained "clarity" is to be utilized. It is by this consciousness that I am aware of myself as someone seeking something - that my actions are perspectivated. Put in other words: Man can act as he feels like. Man's acts are of emotional nature, and the emotionality shows up in the choice of perspective, in which he looks at his actions towards the object. You could say that man looks at his acts in the light of something else. Kant called it the "concept of reason", the element that constitutes goal-directedness and qualifies man as agent.

#### Concluding Remarks

It will be possible to carry out motivation-theoretical research on the basis of the process paradigm. The condition is that the dynamic interrelation between the two invariant entities, perceptuality and emotionality, can be observed. This is the syndetic, scientific study of or-



ganized human behavior. It implies the existence of a Schema of observation. The "Agent-action-Object" -paradigm of Bierschenk & Bierschenk (1986) fulfills the formal requirements of such a Schema. It objectifies the observer of behavior and it becomes possible to process observed behavior by two modes of action:

analytic action

and

syndetic action.

The purpose of the former is to fulfill the needs of the individual, meaning that the purpose of analytic action is consumption. The purpose of the latter is to fulfill the needs of the objective, meaning that the purpose of syndetic action is production.

The concept of rationality of the latter is acting according to Kant's "categoric imperative". In other words: it is acting morally.

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### Author Notes

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